

Anti-Smad4(DPC4) Antibody (Monoclonal, DCS-46)

Catalog Number: MA1089

About Smad4

SMAD4 plays a pivotal role in signal transduction of the transforming growth factor beta superfamily cytokines by mediating transcriptional activation of target genes. Smad4 signalling in T cells is required for suppression of gastrointestinal cancer. Mutational inactivation of SMAD4 causes TGF-beta unresponsiveness and gave a basis for understanding the physiologic role of this gene in tumorigenesis. Mutations in DPC4 (SMAD4) cause juvenile polyposis syndrome, but only account for a minority of cases.

Overview

Product Name	Anti-Smad4(DPC4) Antibody (Monoclonal, DCS-46)
Reactive Species	Human, Mouse, Rat
Description	Boster Bio Anti-Smad4 (DPC4) Antibody (Monoclonal, DCS-46) catalog # MA1089. Tested in ICC, WB applications. This antibody reacts with Human, Mouse, Rat.
Application	ICC, WB
Clonality	Monoclonal DCS-46
Formulation	Mouse ascites fluid, 1.2% sodium acetate, 2mg BSA, with 0.01mg NaN3 as preservative.
Storage Instructions	Store at -20°C for one year from date of receipt. After reconstitution, at 4°C for one month. It can also be aliquotted and stored frozen at -20°C for six months. Avoid repeated freeze-thaw cycles.
Host	Mouse
Uniprot ID	O70437

Technical Details

Immunogen	Recombinant human Smad4 (DPC4).
Predicted Reactive Species	Bovine, Monkey
Recommended Detection Systems	Boster recommends Enhanced Chemiluminescent Kit with anti-Mouse IgG (EK1001) for Western blot, and HRP Conjugated anti-Mouse IgG Super Vision Assay Kit (SV0001-1) for ICC.
Cross Reactivity	No cross-reactivity with other proteins
Isotype	Mouse IgG1
Form	Lyophilized
Concentration	Adding 1 ml of PBS buffer will yield a concentration of 100 ug/ml.
Purification	Ascites

Suggested Dilutions

Dilute the sample so that the expected range of concentrations fall within the detection range of this kit.

If the expected range of concentration is unknown, a pilot test should be conducted to decide the optimal dilution ratio for your samples.

Some PubMed article(s) citing the expression level of this target are as follows:

Boster Bio's internal QC testing used:

Immunocytochemistry , 1ug/ml, Human, -

Western blot, 0.5-1ug/ml, Human, Mouse, Rat

Anti-Smad4(DPC4) Antibody (Monoclonal, DCS-46) (MA1089) Images

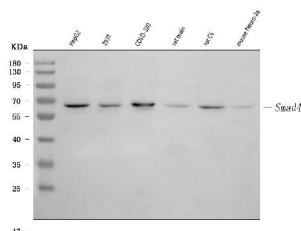


Figure 1. Western blot analysis of Smad4 using anti-Smad4 antibody (MA1089).

Electrophoresis was performed on a 5-20% SDS-PAGE gel at 70V (Stacking gel) / 90V (Resolving gel) for 2-3 hours. The sample well of each lane was loaded with 30 ug of sample under reducing conditions.

Lane 1: human HepG2 whole cell lysates,

Lane 2: human 293T whole cell lysates,

Lane 3: human COLO-320 whole cell lysates,

Lane 4: rat brain tissue lysates,

Lane 5: rat C6 whole cell lysates,

Lane 6: mouse Neuro-2a whole cell lysates.

After electrophoresis, proteins were transferred to a nitrocellulose membrane at 150 mA for 50-90 minutes.

Blocked the membrane with 5% non-fat milk/TBS for 1.5

hour at RT. The membrane was incubated with mouse anti-

Smad4 antigen affinity purified monoclonal antibody

(Catalog # MA1089) at 1 ug/mL overnight at 4°C, then

washed with TBS-0.1%Tween 3 times with 5 minutes each

and probed with a goat anti-mouse IgG-HRP secondary

antibody at a dilution of 1:10000 for 1.5 hour at RT. The

signal is developed using an Enhanced Chemiluminescent

detection (ECL) kit (Catalog # EK1001) with Tanon 5200

system. A specific band was detected for Smad4 at

approximately 60 kDa. The expected band size for Smad4 is at 60 kDa.

6 Publications Citing This Product

1. PubMed ID: 25371235, TGF β 2 regulates the proliferation of lung adenocarcinoma cells by inhibiting PIK3R3 expression
2. PubMed ID: 19824107, Emodin protects rat liver from CCl₄-induced fibrogenesis via inhibition of hepatic stellate cells activation
3. PubMed ID: 24746831, Tang Y, Li Y, Yu H, Gao C, Liu L, Chen S, Xing M, Liu L, Yao P. J Nutr Biochem. 2014 Jun;25(6):675-82. Doi: 10.1016/J.jnutbio.2014.02.009. Epub 2014 Mar 19. Quercetin Prevents Ethanol-Induced Iron Overload By Regulating Hcpidin Through The Bmp6/S...

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